

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1. (Original) An image processing apparatus comprising:

first coding means for performing coding by band having a predetermined height;

first decoding means for decoding data coded by said first coding means into bitmap data;

memory means for storing the bitmap data for one band decoded by said first decoding means;

second coding means for encoding the bitmap data stored in said memory means by a coding method selected from plural coding methods; and

second decoding means for selecting and performing a first decoding method capable of transferring the bitmap data to a printer engine in realtime, or a second decoding method which needs to render the bitmap data before transferring the data to the printer engine, in accordance with the coding method selected by said second coding means,

wherein before coding is performed by said first coding means, a decoding method performed by said second decoding means is predicted, and if the predicted decoding method is the second decoding method, the band height is reduced to half of that in case of the first decoding method.

Claims 2. - 11. (Canceled)

Claim 12. (New) The image processing apparatus according to claim 1, further comprising coded-representation forming means for converting input image data in page description language into coded representation including at least one of a bitmap object, a run length object, a trapezoidal object, a box object, and a fixed-boundary code object.

Claim 13. (New) The image processing apparatus according to claim 1, further comprising image-type discrimination means for discriminating an image type of image data, wherein said second coding means selects, from plural coding methods, a coding method corresponding to the image type discriminated by said image-type discrimination means, and performs coding by the selected coding method.

Claim 14. (New) An image processing method comprising:

- a first coding step of performing coding by band having a predetermined height;
- a first decoding step of decoding data coded in said first coding step into bitmap data;
- a storing step of storing the bitmap data for one band decoded in said first decoding step;
- a second coding step of encoding the bitmap data stored in said storing step by a coding method selected from plural coding methods; and

a second decoding step of selecting and performing a first decoding method capable of transferring the bitmap data to a printer engine in realtime, or a second decoding method which needs to render the bitmap data before transferring the data to the printer engine, in accordance with the coding step selected in said second coding step,

wherein before coding is performed in said first coding step, a decoding method performed in said second decoding step is predicted, and if the predicted decoding method is the second decoding step, the band height is reduced to half of that in case of the first decoding step.

Claim 15. (New) The image processing method according to claim 14, further comprising a coded-representation forming step of converting input image data in page description language into coded representation including at least one of a bitmap object, a run length object, a trapezoidal object, a box object, and a fixed-boundary code object.

Claim 16. (New) The image processing method according to claim 14, further comprising an image-type discrimination step of discriminating an image type of image data,

wherein said second coding step includes selecting, from plural coding methods, a coding method corresponding to the image type discriminated in said image-type discrimination step, and performing coding by the selected coding method.